

CLAIMS

1. A transgenic cell line designated BGMK-hDAF.

2. A cell line established from a transgenic cell line designated BGMK-hDAF, wherein said established cell line has a property selected from the group consisting of (a) increased sensitivity to one or more enteroviruses compared to buffalo green monkey kidney cell line, and (b) permissiveness to echovirus selected from the group consisting of echovirus-6 and echovirus-11.

3. The cell line of Claim 2, wherein said cell line has the sensitivity to enterovirus of the cell line designated BGMK-hDAF.

4. A transgenic buffalo green monkey kidney cell line expressing human decay accelerating factor, wherein said cell line has a property selected from the group consisting of (a) increased sensitivity to one or more enteroviruses compared to buffalo green monkey kidney cell line, and (b) permissiveness to echovirus selected from the group consisting of echovirus-6 and echovirus-11.

5. The cell line of Claim 4, wherein said human decay accelerating factor is encoded by a sequence selected from SEQ ID NO:1 and SEQ ID NO:3.

6. The cell line of Claim 4, wherein said transgenic buffalo green monkey kidney cell line has the sensitivity to enterovirus of the cell line designated as BGMK-hDAF.

7. The cell line of Claim 4, wherein said cell line is BGMK-hDAF.

8. A composition comprising a transgenic buffalo green monkey kidney cell expressing human decay accelerating factor, wherein said cell has a property selected from the group consisting of (a) increased sensitivity to one or more enterovirus compared to buffalo green monkey kidney cell line, and (b) permissiveness to echovirus selected from the group consisting of echovirus-6 and echovirus-11.

9. The composition of Claim 8, wherein said composition further comprises a cell type other than said transgenic buffalo green monkey kidney cell line, and wherein said transgenic buffalo green monkey kidney cell and said cell type are in mixed-cell type culture.

10. The composition of Claim 9, wherein said cell type is selected from the group consisting of RD cells, H292 cells, A549 cells, MRC-5 cells, KB cells, and CaCo-2 cells.

11. A composition comprising a transgenic cell designated BGMK-hDAF.

12. The composition of Claim 11, wherein said composition further comprises a cell type other than said BGMK-hDAF cell, and wherein said BGMK-hDAF cell and said cell type are in mixed-cell type culture.

13. A composition comprising a cell established from a transgenic cell line designated BGMK-hDAF, wherein said established cell has a property selected from the group consisting of (a) increased sensitivity to one or more enteroviruses compared to buffalo green monkey kidney cell line, and (b) permissiveness to echovirus selected from the group consisting of echovirus-6 and echovirus-11.

14. The composition of Claim 13, wherein said composition further comprises a cell type other than said established cell, and wherein said established cell and said cell type are in mixed-cell type culture.

5 15. A method for detection of enterovirus in a sample, comprising:

a) providing:

i) a sample; and

ii) a composition comprising a cell designated BGMK-hDAF;

10 b) inoculating said cell with said sample to produce an inoculated cell; and

c) observing said inoculated cell for the presence of said enterovirus.

15 16. The method of Claim 15, wherein said composition further comprises a cell type other than said BGMK-hDAF cell, and wherein said BGMK-hDAF cell and said cell type are in mixed-cell type culture.

17. A transgenic cell line designated CV-1-hDAF.

20 18. A method for detection of enterovirus in a sample, comprising:

a) providing:

i) a sample; and

ii) a composition comprising a cell designated CV-1-hDAF;

b) inoculating said cell with said sample to produce an inoculated cell; and

25 c) observing said inoculated cell for the presence of said enterovirus.